WHAT IS DAB DIGITAL?

What is DAB Radio?

DAB stands for **Digital Audio Broadcasting**, this is a way of broadcasting radio digitally via a network of transmitters. It provides listeners with **more choice, better sound quality and more information.**

More Choice

Because of the way DAB technology works, broadcasters can transmit many more stations than ever before. Listeners in most major towns and cities in the UK can receive between **30 and 50 radio stations with a digital radio**, in many cases that's more than double what's available on analogue. Because digital radio uses the spectrum more efficiently than analogue, it is possible to broadcast more channels using the same frequency, making room for broadcasters to expand their station portfolios.

Less Noise

DAB digital radio delivers improved sound quality. The **technology allows the receiver to lock on to the strongest signal** it can find and ignore everything else. This eliminates the hiss, crackle and fade so familiar on analogue radio.

Ease of Use

A DAB digital radio will tune to a station at the touch of a button. No more fine tuning a station to get the best reception. A DAB set allows the listener to scroll through a list of available stations by name - then tune in by pressing the 'select' button.

More Information

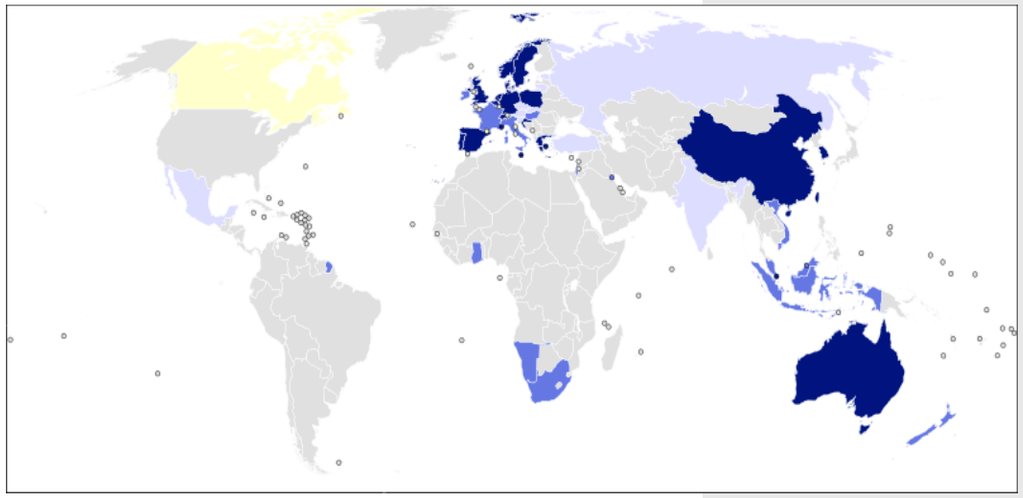
Have you ever heard a song on the radio and wanted to know who it is by or what it's called? Or tuned into speech radio and wanted to know what the programme is about or who is speaking? Digital Radios have a screen which can **show text information transmitted by the radio station**. Some stations send information **about latest news, sports scores, what's on now and next, website address and phone numbers**. Some radios offer an option to view the Electronic Programme Guide (EPG) which shows listings information for some stations. It is also possible to Pause rewind and record live radio.

FM Vs DAB

Traditionally radio programmes were broadcast on different frequencies via FM and AM, and the radio had to be tuned into each frequency, as needed. This used up a comparatively large amount of spectrum for a relatively small number of stations, limiting listening choice. DAB is a **digital radio broadcasting system that through the application of multiplexing and compression combines multiple audio streams onto a relatively narrow band** centred on a single broadcast frequency called a DAB ensemble.
Within an overall target bit rate for the DAB ensemble, individual stations can be allocated different bit rates. The number of channels within a DAB ensemble can be increased by lowering average bit rates, but at the expense of the quality of streams. Error correction under the DAB standard makes the signal more robust but reduces the total bit rate available for streams.

MOST POPULAR STATIONS INCLUDE:

- BBC RADIO ONE
- BBC RADIO TWO
- BBC RADIO FOUR
- BBC RADIO FIVE LIVE
- BBC RADIO FIVE LIVE SPORTS EXTRA
- MAGIC
- KISS
- SMASH HITS FOR DAB
- HEART
- CAPITAL
- ABSOLUTE RADIO
- FUN KIDS
- SMOOTH
- MINISTRY OF SOUND RADIO
- TALKSPORT



PURE
EVOKE-1
PURE EVOKE-1
Marshall Edition
Marshall
PURE
EVOKE-1
Now Playing
PURE
highway
PURE HIGHWAY
Now Playing...
PURE
12:56
CHRONOS II
PURE
8:23
PURE
PocketDAB 1500
2:09
PocketDAB 1500
Now playing...
info
preset
digital radio
menu
DAB/FM
PURE
PURE
12:38
PHILIPS
DAB & FM RADIO
PHILIPS
PURE
ROBERTS
tangent trio
ROBERTS
21:03
JazzFM
Jazz and Blues
ruarkaudio
PURE
60's Classic Radio
Sugar and Spice
ROBERTS
CAPITAL GOLD
Pop Music
On/Off
ecologic 1
DAB/FM RDS Digital Portable Radio
kogan
92.10 MHz
[No RadioText]
POWER
MODE
ALARM
INFO
BACK
MENU
TUNING
VOLUME
LANA DEL REY
1245

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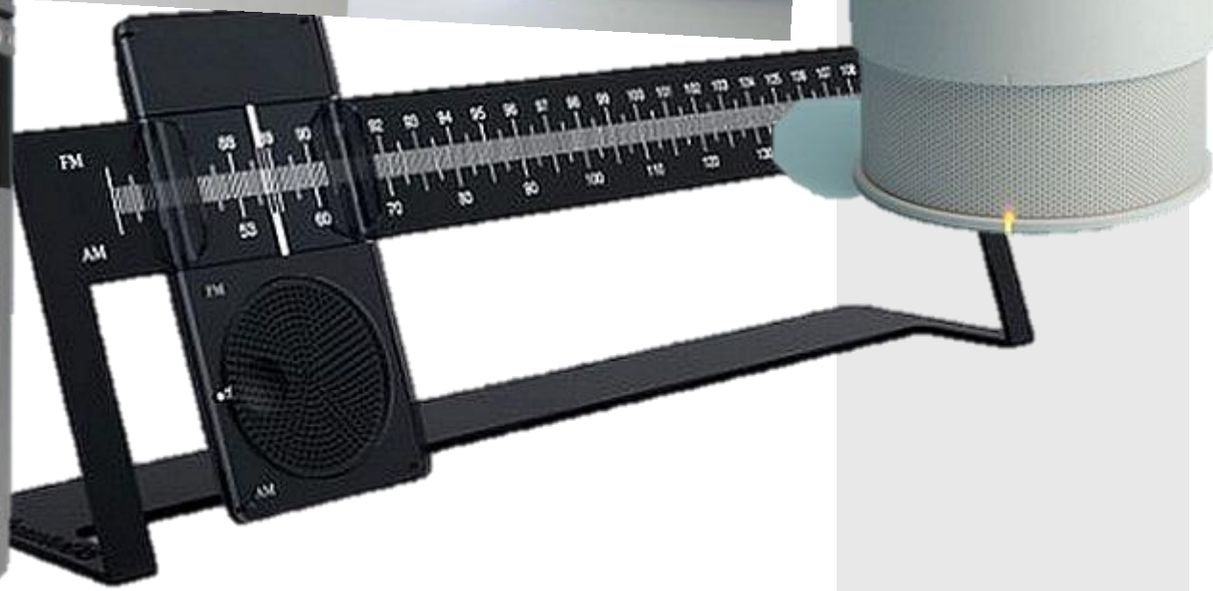


DESIGNER PRODUCTS

BANG &
OLUFSEN

DESIGNER
David Lewis

DIMENSION W x H x D/ WEIGHT
28 x 39 x 27 cm (lid open)/3.7 kg

MATERIAL(S)
Aluminium, coated glass

COLOUR(S)
Cabinet: black

POWER CONSUMPTION
Typical: 12 W;
Off mode: 0 W

DISPLAY
Vacuum Fluorescent Display with automatic light intensity control

RADIO
DAB/DAB + optional (band III) + FM (with RDS);
99 radio presets with naming capabilities

MUSIC FORMAT(S)
MP3, WMA

CONNECTIONS
2 x Power Link, 4 x Audio AUX in/out,
1 x FM aerial,
1 x DAB aerial,
1 x Master Link,
1 x Headphone

FEATURES
CD memory: Built-in SM/MMC Card reader up to 8 GB
Naming (200 titles), random, repeat

ACCESSORIES
Wall bracket: aluminium
Floor stand: aluminium

LOUDSPEAKER(S)

FREQUENCY RANGE
15 - 20,000 Hz

PHILLIPPE STARCK – WET TUNES
Clock radio Splash-proof AM/FM radio.
Integrated LCD clock with adjustable backlight.
Battery operated. Suitable for wall-mounting

Article Nr	01.376003.00.001
Description	Starck Wet Tunes Bath & Shower Clock
Wattage	0 W
Voltage	4,5 V V
Color	Silver
CBS Code	85279290
Material	Spraypainted
Special Feature (1)	Splash proof AM/FM radio
Special Feature (2)	Battery operated

REVO
DAB DIGITAL RADIO SUPER SIGNAL
£179.95

“Design philosophy and uncompromising quality”

DAB, DAB+ and FM Tuner with RDS

Bluetooth® wireless streaming with CD quality aptX® technology

Graphical OLED display with secret-until-lit lens

Intuitive joystick controlled user interface

Digital alarm clock functionality with sleep and snooze

8 favourite station presets per mode

10W Class-D amplifier with 3.5” BMR speaker driver

Stereo RCA, headphone and AUX IN connectors

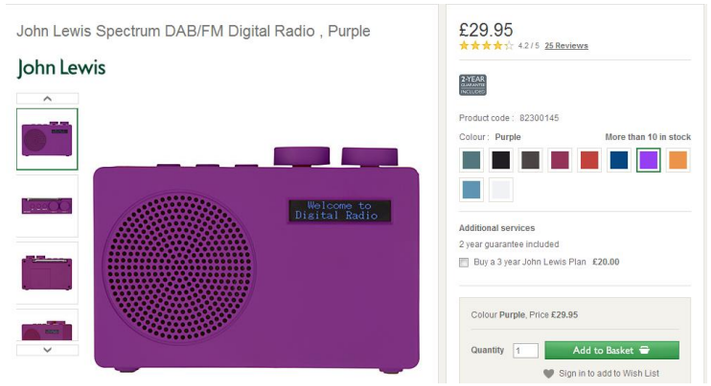
Full feature remote control (included)

Multi-country PSU (UK, Europe, USA and Asia)

Dimensions: 135mm (W) x 210mm (H) x 140mm (D)

Weight: 2.3kg

PRODUCT ANANLYSIS


John Lewis Spectrum DAB/FM Digital Radio , Purple
John Lewis
Welcome to Digital Radio
£29.95
4.2 / 5 25 Reviews
Product code : 82300145
Colour : Purple
More than 10 in stock
Additional services
2 year guarantee included
Buy a 3 year John Lewis Plan £20.00
Colour Purple, Price £29.95
Quantity 1
Add to Basket
Sign in to add to Wish List

JOHN LEWIS OWN BRAND SPECTRUM DAB/FM DIGITAL RADIO

Cute, functional and fun; the John Lewis Spectrum DAB/FM radio is a smart choice for digital listening. It can be fully powered by mains or battery making it just at home on the move or on a shelf at home. The soft touch finish also makes it easy to pick up and carry around.

Key benefits:

•Dual **DAB and FM** wavebands allow you to listen to your favourite analogue stations or crystal clear digital broadcasts.

•The soft touch rubber finish is pleasant and secure in the hand.

•A headphone socket lets you listen to your music without bothering others.

•A choice of mains and battery operation gives you the freedom to roam.

Brand
John Lewis
Dimensions
H110 x W155 x D47mm
Included
USB Cable and Power Adapter
Model name / number
Spectrum Aubergine
Power Supply
Mains / Battery (4x AA, not included)
Radio tuner
DAB, FM
Weight
350g

Available in 9 colours, all the same material.

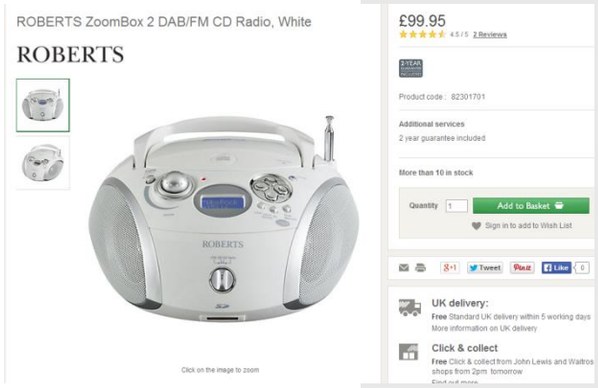
ROBERTS Revival RD60 DAB Digital Radio , Bramble
ROBERTS
£159.95 - £199.95
3.6 / 5 10 Reviews
Product code : 82300718
Colour : Bramble
More than 10 in stock
Additional services
2 year guarantee included2 year guarantee included
2 year guarantee included
Buy a 3 year John Lewis Plan £22.00
Buy a 3 year John Lewis Plan £20.00
Colour Bramble, Price £199.95
Quantity 1
Add to Basket
Sign in to add to Wish List

ROBERTS REVIVAL RD60 DAB DIGITAL RADIO

Classic styling combines with state-of-the-art DAB technology. This burgundy ROBERTS Revival digital radio features an easy to read 16 x 2 character LCD display and amber backlight.
It's a doddle to find your favourite stations thanks to the auto tune feature, and there's a handy socket so you can listen with your own headphones without disturbing – or being disturbed – by others.

Alarm
NO
Battery life
Up to 120 hours
Brand
ROBERTS
Clock
YES
Connection Type
Line output socket
Dimensions
H15.5 x W25 x D10cm
Eligible for International Delivery
NO
Headphone socket
YES
Model name / number
RD60CCBT
Power Supply
Mains or 4x D batteries (not included)
Preset stations
YES
Radio tuner
DAB, FM
Speaker output
1W
USB ports
NO
Waterproof
NO
Weight
1.5k

2 year garuntee


ROBERTS ZoomBox 2 DAB/FM CD Radio, White
ROBERTS
£99.95
4.5 / 5 2 Reviews
Product code : 82301701
Additional services
2 year guarantee included
More than 10 in stock
Quantity 1
Add to Basket
Sign in to add to Wish List
UK delivery:
Free Standard UK delivery within 5 working days
More information on UK delivery
Click & collect
Free Click & collect from John Lewis and Waitrose shops from 2pm tomorrow
Click on the image to zoom

ROBERTS ZOOMBOX 2 DAM/FM CD DIGITAL RADIO

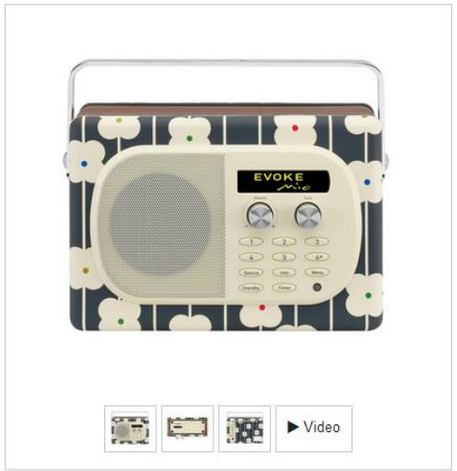
Enjoy **crisp DAB quality** radio in the pleasingly compact form of the ROBERTS ZoomBox 2 DAB radio. This portable radio offers the option of playing your MP3/WMA files from USB, SD card and CD, so you can enjoy your own music. Alternatively, why not take advantage of the **40 station presets** to discover some new favourite radio stations?
A thoughtful feature of the ZoomBox is its namesake: a feature that 'zooms' into the display to make it bigger, so that it is easier to see menus and information.

•DAB/FM RDS wavebands give you a variety of stations
•Zoom display function for easier display viewing
•40 station presets mean you will never run out of something to listen to
•MP3/WMA playback from USB, CD and SD card gives you listening flexibility
•Deep bass boost for an intense listening experience
•Programmable CD playback

Clock
YES
DAB
YES
Dimensions
H13.5 x W25 x D25cm
Eligible for International Delivery
NO
FM Transmitter
YES
Internet
NO
Model name / number
ZOOMBOX2
Portable
YES
Power Supply
6x C Batteries or mains operated (AC adaptor included)
Preset stations
40
Radio tuner
DAB, FM
Weight
1.85kg

PRODUCT ANANLYSIS

PURE Evoke Mio VL-61663 Portable DAB Radio - Abacus Edition



£149.99

- Alarm
- With sleep timer
- 30 presets
- Mains & battery powered

PRODUCT INFORMATION

View product details

PURE EVOKE MIO VL-61663 PORTABLE DAB RADIO

Styled by renowned fashion designer Orla Kiely, the Pure **Evoke Mio VL-61663 Portable DAB Radio** brings iconic style and rich audio for immersive radio enjoyment.

Love the radio

This ultra chic radio is designed with a groovy Abacus flower print with an eye-catching style that just oozes fashion.

The easy to use **Evoke Mio** radio offers both digital radio channels and FM stations. There are 30 presets to pick from so you'll have no trouble finding your listening pleasure.

Radio gogo

The lightweight and portable design allows you to take the radio with you and an optional Pure ChargePAK gives you hours of on on-the-go listening. You can even connect your iPod or MP3 player and use the radio speakers for your music.

With easy controls and a high quality OLED display you can effortlessly tune into any station. The energy saving radio even has a number of alarms to get you out of bed!

Perfectly suited as homeware, the Pure **Evoke Mio VL-61663 Portable DAB Radio** is great for the kitchen, bedroom or in the garden, enjoy the exceptional digital sound on those sunny days.

Product code: 049902

Type	DAB
Portable	Yes
Analog tuner	FM
Digital tuner	Yes
Frequency	50 Hz
Buzz alarm	Yes
Radio alarm	Yes
Weekend/weekday alarm	No
Wireless	No
Digital LCD	OLED display
CD player	No
Weather station	No
Snooze control	No
Speakers	1
Bass boost	No
Inputs	6V DC power adaptor socket (230V supplied) ChargePAK connector 3.5mm Line-in for auxiliary devices USB (B type) for product upgrades
Remote control	No
Colour	Slate grey -Abacus Print
Dimensions	210 x 181 x 125 mm (W x H x D)
Weight	1.8 kg
Manufacturer's guarantee	2 years

ROBERTS CRD-42 iDream DAB Clock Radio with iPod Dock - Black

£75.95

- Alarm
- Sleep Timer
- Snooze Function

PRODUCT INFORMATION

View product details

ROBERTS CRD-42 IDREAM CLOCK RADIO WITH IPOD DOCK

The Roberts **CRD-42 iDream DAB Clock Radio with iPod Dock** is a clever little product that offers a number of options to help wake you up on those cold, wet mornings.

As well as the DAB and FM radio capabilities you'd expect, there's also a very handy iPod/MP3 dock which can be used to charge your unit up, or play the favourite tracks you have on the hard drive.

Of course the **iDream**'s main purpose as an alarm clock is to wake you up and there's a variety of ways you can decided how it actually does it. You can go for iPod/MP3 player, radio or buzzer alarms.

Plus there are sleep and snooze options so you can either drift off to sleep to the sound of your favourite music or steal a few more minutes of slumber in the mornings.

The Roberts C**RD-42 iDream DAB Clock Radio with iPod Dock** will have you waking up with a smile on your face, ready to take on whatever the day can throw at you.

Product code: 436746

CONTENT	
Type	DAB & FM Digital Alarm Clock Radio with iPod Dock
TUNER	
Digital tuner	Yes
Analog tuner	No
CLOCK	
Buzz alarm	Yes
Radio alarm	Yes
CD alarm	No
FUNCTIONALITIES	
CD player	No
Time projection	Yes
Snooze control	Yes
Extra functions	Sleep timer, Dual alrms, Multi stage dimmer, Aux input socket for iPod / MP3 playback, Auto time set, Dock for iPod - listen to your iPod whilst it charges, 20 station presets, Infra red remote control, Menu display / selection of all major functions
PRODUCT INFORMATION	
Dimensions	185w x 75h x 150d mm
Weight	670g

SANDSTROM SHFJMC11 Mini Hi-Fi System - Black

£89.99

was £99.99 (£99.99 From 30/04/13 to 07/10/13)

Save £10.00

- Output power: 10 W
- iPod & iPhone compatible
- CD player
- DAB radio

PRODUCT INFORMATION

View product details

ROBERTS CRD-42 IDREAM CLOCK RADIO WITH IPOD DOCK

Enjoy a range of media options with the Sandstrom **SHFJMC11 Mini Hi-Fi System**.

This attractive Hi-Fi system boasts a vertical-loading CD player which is compatible with CD, CDRW, MP3 and WMA formats, giving you freedom to enjoy all your music. And there are FM and DAB radio which means that you can enjoy a wide range of stations.

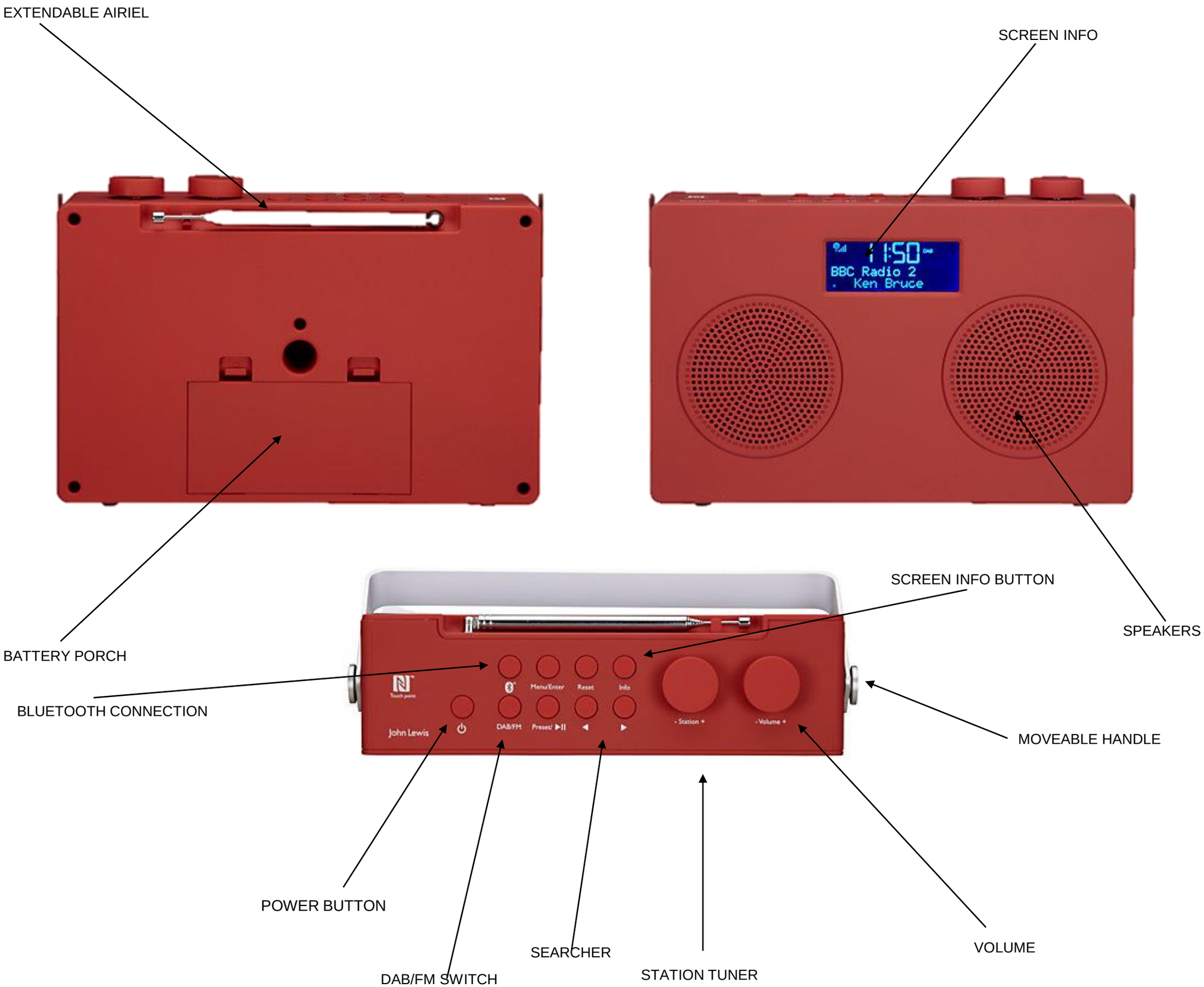
As well as this, there is an iPhone/iPod dock which allows you to connect your iPhone or iPod to the micro docking system to enjoy your music through these speakers. There are even USB and memory card slots, so you can listen to your music from a memory device, whether it's a USB memory stick, SD card or MMC.

Enjoy great sound from a compact system with the Sandstrom **SHFJMC11 Mini Hi-Fi System**!

Product code: 590930

PHYSICAL CHARACTERISTICS	
Type of Speaker	Standing
Compatible with	iPod and iPhone
Colour	Black
Number of speakers	2
PERFORMANCE	
Speaker power	2 x 5 W
Radio	FM / DAB Tuner
Alarm Clock	Yes
CONNECTIONS	
Mains lead	Yes
Input types	SD/MMC
USB connectivity	Yes
Remote control	Yes
OTHER INFORMATION	
Other features	Wall Mountable
Size	221 x 530 x 124mm (HxWxD)
Weight	2.75 kg

GENERIC FEATURES TO A DAB



TARGET MARKET BREAKDOWN

50+ Pensioners

- Likes things to be simple, easy to understand and straight to the point
- Likes to be adventurous with technology, but not too courageous. Tends to stick with basic models of new technology, ipads/ipods, mobile phones, computers etc
- Like to stick more traditional methods, ie physical newspapers, letters in the post, not relying on the internet for all the answers, things they were bought up with.
- Normally in or going into retirement, more time on their hands for things they want to do; hobbies, family…
- The odd exception that doesn't comply with the generic stereotype, one that wants to act and live young again. Extremists.
- Mortgages and other debts normally paid off, more pocket money.

Most likely to use the radio for

- Relaxing
- Entertainment
- News
- Amusement during household chores
- Noise filler
- Garden work

40+

- Well established, settlers
- Money is now at their disposable, either saving for younger generations in the family (collage/uni/marriages etc), for holidays and hobbies for themselves, high quality products on the market, something to show off
- Professionals, home owners, families.
- Rather buy into something that will last then temporary objects that will last temporarily
- Mid life crisis, will spend big on one item at some point in this decade

Most likely to use the radio for

- Relaxing
- Entertainment
- News
- Amusement during household chores
- Noise filler
- Lazy Sunday mornings
- Family events

30+, Young Families

- Settled and established in all areas, work, relationship, money and family status
- Maybe just starting a family so money is tight, looking for cheaper alternatives of high branded products
- Not so driven on brands etc
- Professionals seek for high quality products, money is no object, statement pieces that will last
- Coming out student debts, getting into more bigger ones like mortgages

Most likely to use the radio for

- Entertainment
- Amusement during household chores
- Noise filler
- Quiet alternative to TV
- Personal space

20+, Young Professionals

- Finding themselves established in their chosen career path, others still trying to find their feet
- Recent graduates, in serious debt, still living with parents
- Older 20's might be new homeowners, settling down, buying investments pieces to decorate the home.
- Like more quirky, modern, technology driven designs, something that will stand out to others
- Quite advanced in technology and modern features, bought up with it in their lives. Not scared to approach new movements and trends in order to stay on top, specifically socially.
- Most likely to explore channels on a DAB radio, then just use the generic music ones

Most likely to use the radio for

- Entertainment
- Amusement during household chores
- Noise filler
- Alternative to TV
- Personal space
- News

Late Teens

- Time of self discovery. Generation X, unsure what they really want
- Brand reliant, social status, this includes technology, clothing, food/drink, objects…
- Willing to experiment and buy into current trends and well established brands. Think apple generation, and before that blackberry outburst.
- Not always individual, except the odd occasion.
- Many stereotypes for this age bracket; hipster, geek chic, fashionable, grunge, indie etc
- Unless employed, rely on parents income for purchasing their desired items.
- Always open to try advanced technology, stay on top of the trends, stay ahead.
- Most likely to explore channels on a DAB radio, then just use the generic music ones

Most likely to use the radio for

- Entertainment
- Noise filler
- Alternative to TV
- Personal space
- News
- Keep up to date socially

CONSUMER QUESTIONNAIRES

After narrowing down the possible age range to design for, some more research and personal data collection was required. Here are some examples of the questionnaires of people belonging to the three targeted age groups; **20+**, **30+** and the **over 50's**.

20+

RYAN WINDMILL, 20

New customer; “Loud, modern, compact”

Status; student, shared accommodation, in a relationship

Main Appeal; portability

Extra Features; alarm clock, connectivity to own music and devices, headphone jack

Aesthetically; small, fits into one hand when being carried, light to carry, nothing garish in colour and unspecified in material choice, contemporary in design and shape

Price Range; under £50

Purpose; radio, accompany to work, cooking, studying etc (not bathroom)

Preferable; customizable, personalized to self, mixture of channels on offer (sports, music, news etc)

Technology; connect to smart phone (apple-sync to iphone to get calendar, news, weather, schedule), spotify (wifi connect),

40+

VICTORIA SMITH, 42

New customer; “Small and portable”

Status; bookkeeper, no small children, married, mortgage, two teenage children

Main Appeal; sound quality, durability, portable, not ugly, easy to use, hook on the door, waterproof

Extra Features; cd player, earphones jack, alarm clock, big

Aesthetically; durable (wont break if dropped), big buttons, no corners, 15x20cm approx, no high shine, natural/grey in colour scheme, pop of colour as a feature, handle

Price Range; £50-100

Purpose; listen to radio, kitchen and household, shower, means to escape

Preferable; personal to her, not interested in sport channels etc, would like it dedicated to music. Just for herself

Technology; connect to smart phone and apple products

50+

ALAN SKINNER, 77

New customer; “Simple, compact, modernt”

Status; retired, homeowner, lives with wife and accommodates for the big family often (inc. Small grandchildren)

Main Appeal; a well needed update to old home stereo, sound quality and the simplicity in the design

Extra Features; preset channel stations already stored, cd player, connectivity to smart devices (family music), large screen

Aesthetically; statement feature, nothing too dainty but nothing too big, colour and material wise something that will go with dark wood furnishing, modern and contemporary in design and shape

Price Range; under £200

Purpose; to use the radio, background noise, entertainment for the family

Preferable; something for all the family, not just for personal use, a wide mix of all channels

Technology; connect to smart phones and other devices, multi player CD's, itunes library stored

NEW TECHNOLOGY

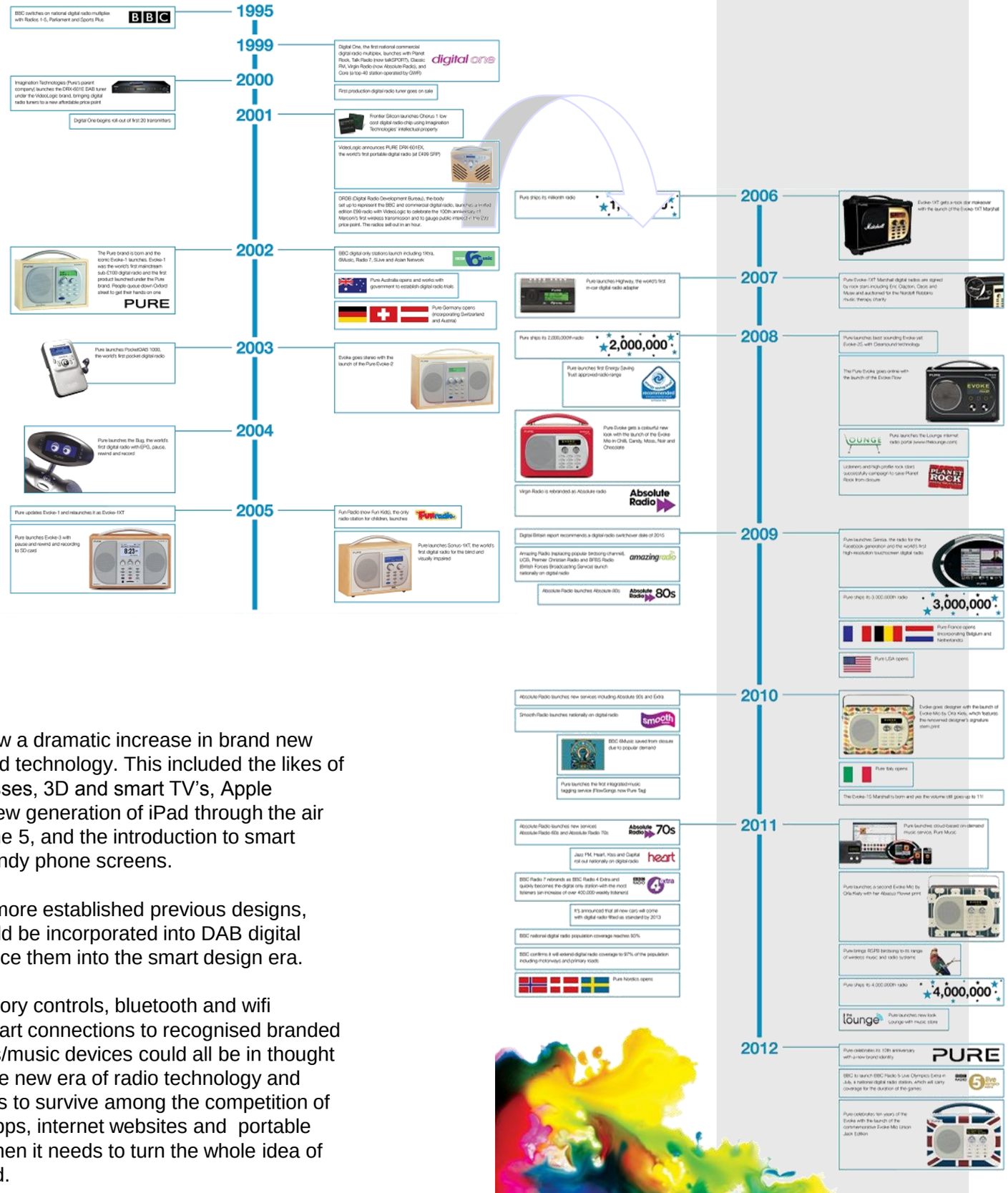
Last year we saw a dramatic increase in brand new smart design and technology. This included the likes of the Google Glasses, 3D and smart TV's, Apple released their new generation of iPad through the air and apple iPhone 5, and the introduction to smart watches and bendy phone screens.

Alongside with more established previous designs, these ideas could be incorporated into DAB digital radios to introduce them into the smart design era.

Projectors, sensory controls, bluetooth and wifi connectivity, smart connections to recognised branded phones/watches/music devices could all be in thought or included in the new era of radio technology and design. If radio is to survive among the competition of mobile phone apps, internet websites and portable music devices then it needs to turn the whole idea of radio on its head.

PURE

Digital Radio & Pure


1995
BBC switches on national digital radio multiplex with Radios 1-5, Parliament and Sports Plus
1999
Digital One, the first national commercial digital radio multiplex, launches with Planet Rock, Talk Radio (now talkSPORT), Classic FM, Virgin Radio (now Absolute Radio), and Core (a top 40 station operated by GWR)
digital one
2000
Imagination Technologies (Pure's parent company) launches the DRX-601E DAB tuner under the VideoLogic brand, bringing digital radio tuners to a new affordable price point
First production digital radio tuner goes on sale
2001
Digital One begins roll-out of first 20 transmitters
Frontier Silicon launches Chorus 1 low cost digital radio chip using Imagination Technologies' intellectual property
VideoLogic announces PURE DRX-601EX, the world's first portable digital radio (at £499 SRP)
DRDB (Digital Radio Development Bureau), the body set up to represent the BBC and commercial digital radio, launches a limited edition DS9 radio with VideoLogic to celebrate the 100m anniversary of Marconi's first wireless transmission and to gauge public interest at the £99 price point. The radios sell out in an hour.
2002
The Pure brand is born and the iconic Evoke-1 launches. Evoke-1 was the world's first mainstream sub-£100 digital radio and the first product launched under the Pure brand. People queue down Oxford street to get their hands on one.
PURE
BBC digital only stations launch including 1Xtra, 6Music, Radio 7, SLive and Asian Network
6music
Pure Australia opens and works with government to establish digital radio trials
Pure Germany opens (incorporating Switzerland and Austria)
2003
Pure launches PocketDAB 1000, the world's first pocket digital radio
Evoke goes stereo with the launch of the Pure Evoke-2
2004
Pure launches the Bug, the world's first digital radio with EPG, pause, rewind and record
2005
Pure updates Evoke-1 and relaunches it as Evoke-1XT
Pure launches Evoke-3 with pause and rewind and recording to SD card
Fun Radio (now Fun Kids), the only radio station for children, launches
Pure launches Sonus-1XT, the world's first digital radio for the blind and visually impaired
2006
Pure ships its millionth radio
Evoke-1XT gets a rock star makeover with the launch of the Evoke-1XT Marshall
2007
Pure launches Highway, the world's first in-car digital radio adapter
Pure Evoke-1XT Marshall digital radios are signed by rock stars including Eric Clapton, Oasis and Muse and auctioned for the Nordoff Robbins music therapy charity
2008
Pure ships its 2,000,000th radio
2,000,000
Pure launches first Energy Saving Trust approved radio range
Pure launches best sounding Evoke yet Evoke-2S with Clearsound technology
The Pure Evoke goes online with the launch of the Evoke Flow
Pure Evoke gets a colourful new look with the launch of the Evoke Mio in Chilli, Candy, Moss, Noir and Chocolate
Virgin Radio is rebranded as Absolute radio
Absolute Radio
Pure launches The Lounge internet radio portal (www.thelounge.com)
Listeners and high profile rock stars successfully campaign to save Planet Rock from closure
2009
Digital Britain report recommends a digital radio switchover date of 2015
Amazing Radio (replacing popular birdsong channel), UCB, Premier Christian Radio and BFBS Radio (British Forces Broadcasting Service) launch nationally on digital radio
amazingradio
Absolute Radio launches Absolute 80s
Absolute Radio 80s
Pure ships its 3,000,000th radio
3,000,000
Pure France opens (incorporating Belgium and Netherlands)
Pure USA opens
2010
Absolute Radio launches new services including Absolute 90s and Extra
Smooth Radio launches nationally on digital radio
smooth
BBC 6Music saved from closure due to popular demand
Pure launches the first integrated music tagging service (FlowSongs now Pure Tag)
Evoke goes designer with the launch of Evoke-Mio by Orla Kiely, which features the renowned designer's signature stem print
Pure Italy opens
The Evoke-1S Marshall is born and yes the volume still goes up to 11!
2011
Absolute Radio launches new services Absolute Radio 60s and Absolute Radio 70s
Absolute Radio 70s
Jazz FM, Heart, Kiss and Capital roll out nationally on digital radio
heart
BBC Radio 7 rebrands as BBC Radio 4 Extra and quickly becomes the digital only station with the most listeners (an increase of over 400,000 weekly listeners)
4extra
It's announced that all new cars will come with digital radio fitted as standard by 2013
BBC national digital radio population coverage reaches 90%
BBC confirms it will extend digital radio coverage to 97% of the population including motorways and primary roads
Pure launches cloud-based on-demand music service, Pure Music
Pure launches a second Evoke-Mio by Orla Kiely with her Abacus Flower print
Pure brings RSPB birdsong to its range of wireless music and radio systems
Pure ships its 4,000,000th radio
4,000,000
lounge
Pure launches new look Lounge with music store
2012
Pure celebrates its 10th anniversary with a new brand identity
PURE
BBC to launch BBC Radio 5 Live Olympics Extra in July, a national digital radio station, which will carry coverage for the duration of the games
5live
Pure celebrates ten years of the Evoke with the launch of the commemorative Evoke-Mio Union Jack Edition

CONSUMER QUESTIONNAIRES

Through the design process, it is vital that the target market are involved and know exactly what is being designed for them. I was lucky enough to send out emails to varying people of the consumer age groups and have responses of the chosen initial final design. Here are their answers;

Hi Abbey

It looks very stylish. I was surprised at the size, but I understand it's meant to be wall-mounted, so it would take up about as much space as an average clock, which is about right. I like the asymmetric controls, but my husband would hate that as he likes everything to be balanced and symmetrical, so I suppose it will appeal to some and not to others.

Would I buy it? How much will you be charging????

On one drawing you show the ring as being LED ring, so I had assumed it would be giving info, but the computer generated image is different (and better for a room setting I would think). Which is it going to be?

Is this any help?

Regards
Pauline Wise (Age range: OAP)

Abbey,

Feedback Victoria aged 24 oops sorry I mean 42!!!

I love the trendy round shape, I would like maybe the buttons to be in a different colour but understand why they are brown. Would the weight be okay to hang on the door and on that note how heavy would it be??

I think the concept is a great modern take on a traditional 'old school' appliance. And of course I would buy this refreshing round Dab radio, great design

Hi Abbey

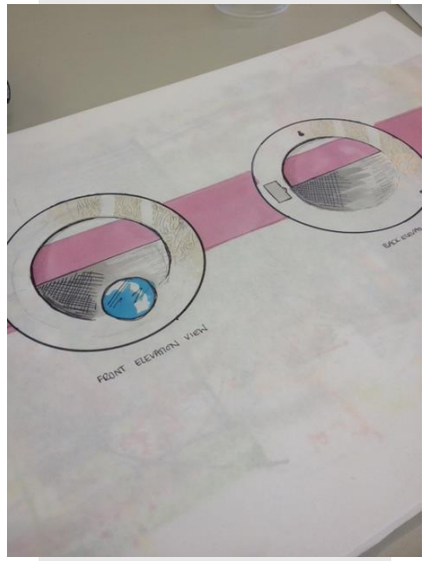
Looks good. I think if would be better to distribute the buttons on both sides.
How does it stand up?

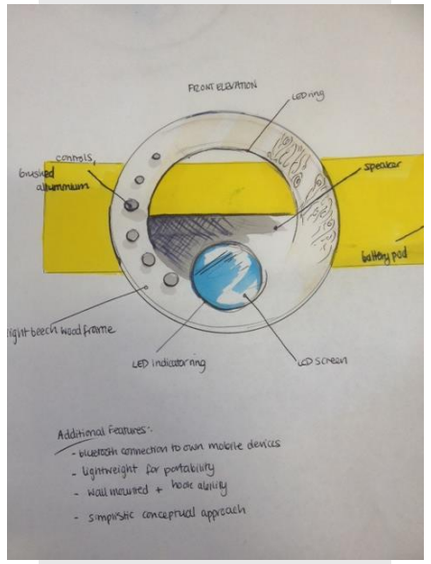
It does seem quite big in comparison to DAB radios I have had in the past.

Oh so it is to go on the wall .... I like it makes it more of a statement piece.

It is quite a funky design which somehow is at odds with the wood finish. What about some bright colours or as I understand it GRAY is very much the interior colour of choice at the moment.

Bye.....Jack (50s)





HI Abs feedback on radio

Nice contemporary look
Would make an attractive feature if wall mounted.
Prefer all the buttons to be on one side in the descending order of size largest at the bottom of wood ring.
I like the LED ring adds to the modern look
Understand you can carry it around on your arm but are you able to stand it on a hard surface as from your picture it looks as if it has a rounded base.
Would you consider having an alternative colour scheme e.g.Dark wood ring to contrast with light plastic knobs and screen and even go to a painted wood. Considerations when you go into production.
Good Luck with it. I 'd definitely have one.

Elizabeth (26)

Please let Abbey know that I thought her design was very good - probably would appeal more to 25 - 35 year olds (although I liked it and I'm a couple of years older than that (!) I definitely thought that the controls would be better all on one side.

Mark 50

Abb

Really contemporary in shape and design for a radio, but I like it.

Bit too chic and sleek for my taste, but it might just be my age, gender and specific likes. Its more of a futuristic approach rather than the successful vintage design style.

If I had the power to decide on control position I would put them all to one side, on the right mainly so I can grip with my lift hand and control with my right.

Jake (21)

CONSUMER NEEDS, ROOM DEFINITIONS

As the design is intended to be moved from room to room around the house, it is unlikely all interiors will follow a similar deco nor theme, this is why it is vital for the form and colour scheme of the radio is simplistic and stylish to suit all the intended uses and looks of each individual room. Here I researched into what each rooms in the house purpose was, why was it used and the likely reasons the radio would be moved into it.

KITCHEN – work and leisure
A noise filler for cooking and cleaning, needed to be heard but not seen, mess and water proof to protect its internal features. If it hangs it will be more applicable for it surroundings. Big screen, big speakers, big buttons.

BATHROOM – relaxing and general
An accompanist for showering and bathing purposes. Needs to be waterproof for obvious reasons and able to be put somewhere where it is out of reach and harms way.

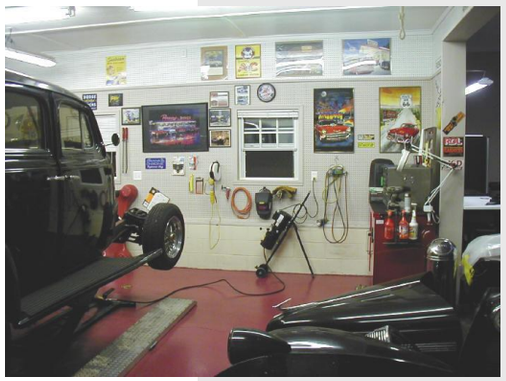
LIVING ROOM – social and relaxing
Background noise for social purposes, to fill the blank space. Something to chill too, statement feature for this intended room but needs to be also simple enough to fit in with the drastic changes deco.

DINING ROOM – social and relaxing
Atmospheric for entertainment purposes, background noise. Not something that will stand out is needed, subtle is the best policy for this room.

UTILITY ROOM– work
Something to sing along to when doing the washing and other chores, not always going to be kept in this room so needs an easy method of transportation on the radio. Doesn't need to suit the deco so much as its not permanent.

HOME OFFICE – work and relaxing
Background noise for working too, somewhat a feature to the room, after finishing working, can be moved to bedroom say to continue wind down etc. modern approach to style.

CONSERVATORY– social and relaxing
A social aspect, different uses, could be a child's room so in that case needs to be able to be hung up out of the reach of children etc. Wooden featured would look good against the light in the room.

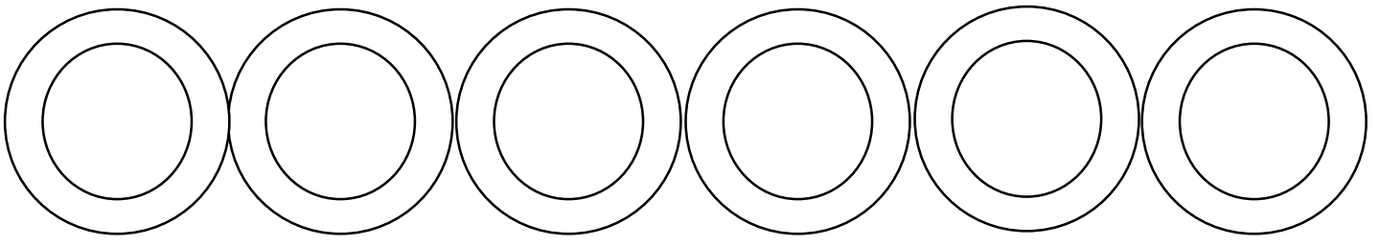


GARAGE– work and leisure
Background nose, needs to be grease and mess repellent to protect its longitivity. Needs to be put somewhere out of harms way, and loud enough to blur out the excess background noise.

CONSUMER TESTING

One crucial stumble point I came across was designing the ergonomics of the controls, particularly the position, size and shape of them. Through the feedback of emails (previous page) and the testing trialled on numerous people (above are some example photos) I decided to go for them all to be one sided on the right, and in descending size order, keeping each partner button with one another. The three diagrams below are the suggestions that were given to help people visualise the outcome. The test above was to see how the consumer would interact with the product, and how they would like to handle and control it.

Surprisingly the majority preferred the controls all grouped together and with clear indication as to what each one powers.



1. Buttons on the left hand side, spaced out in descending order
2. Buttons on the left hand side, grouped together
3. Buttons on the bottom, spaced out
4. Buttons on the bottom, grouped together
5. Buttons on the right hand side, spaced out in descending order
6. Buttons on the right hand side, grouped together

MATERIALS RESEARCH

The materials and finishes are vital to a successful product as it dictates the overall aesthetics and general look to the end result. From the start, I wanted to use a combination of modern and traditional materials to create a contemporary outcome. The use of wood and metal/plastic will reach the desired look, feel and style and would appeal to a variety of potential customers, particularly my dedicated target market being designed for.

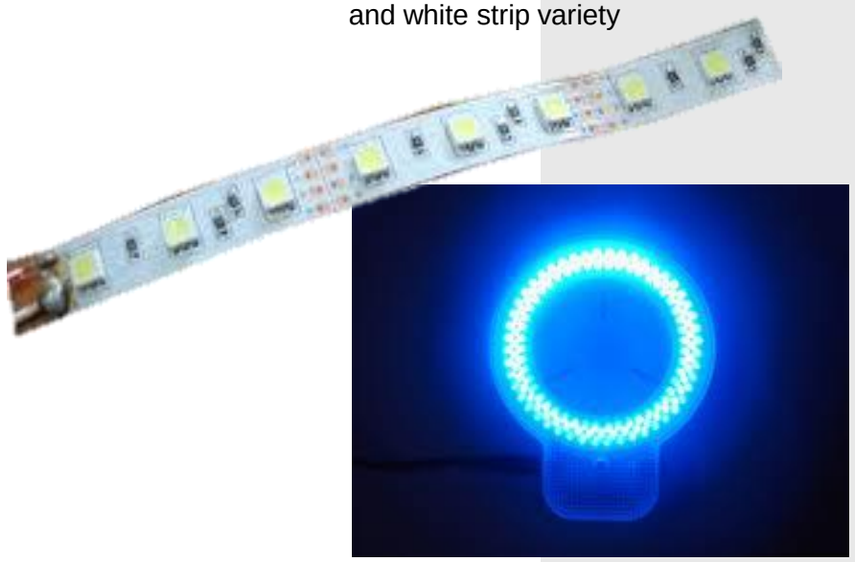
Examples of varying wood finishes, grains, styles and colours

The main material choice I have for this product Is a wood o some kind, the natural aesthetics is ideal for the transition from room to room and the difference in deco. Lighter woods would be my preferred option but, darker woods and finishes could be incorporated in some way to create a potential range. The most likely choice for me to use in my model would be ash, easy to work with, beautiful outcome and takes well to artificial finishes. MDF will probably be my actual material but I will then finish it to a high realistic standard.

The other feature I need to Consider materials for is the buttons, originally they were going to be brushed aluminium, but after more designing and consultations corain plastic was decided to be the ultimate choice. Its clean cut, beautifully finished and rich in form. For the model itself, a cheaper alternative will be used as corain is a little on the pricey side. An attempt to create the same finish will be applied but might not show the true class to the product intended.

Examples of corian plastic and the range of colours available, also the outcome of brushed aluminium

LED lights will be incorporated into the design using the blue bulbs and white strip variety



DESIGN SPECIFICATION

By writing a design spec, it gives me a small checklist to aid me through the design and make process. It also combines all my research together to create the ultimate product that is approved by the target market, right before any decisions are made.

SPEC POINT	VITAL	WOULD LIKE TO	IF POSSIBLE
Aesthetics	It is vital that the product is not heavily themed, age specific or gender specific. It need to be able to suit multiple and varied room deco's and be able to transport from room to room with ease; It needs to fit in with the changing times and fashion trends as well not stand out for the wrong reasons. It therefore cannot be an eye sore and will need to be finished to a very high standard to meet the brief.	It be ideal for the piece to have a sense of individuality or personality, but I need to research how to accomplish this without using patterns, images or words. A monochrome colour scheme could be an idea, but this is not original anymore as a number of "lifetime" products use this to add a sense of creativity. It would be ideal to make it a statement piece in order to bring back the wow factor and the want factor for radios.	Could have pattern or style in a form that doesn't suggest appeal to only one gender or target market.
Ergonomics	It is important that the size is made accordingly to the age of the target audience in question. They must be able to reach it, use it and feel comfortable using it, otherwise it will a hindrance rather than a help. It cannot be too big or it'll be a massive eye sore to the consumer and no one wants an ugly product.	I would like to use measurements that would be most comfortable for a variety of ages, therefore it can benefit the maximum market. It matters more for twenties- forties age bracket , as they are my key intended users.	
Target Market	It is crucial that the product appeals to adults especially in the aimed target brackets, as the radio is meant to be a "working" furniture piece in terms of its portability and accessibility.	I would like the target market to be spread over a variety of age brackets, to create a universal product and one which can last the ages. It would be most beneficial in the industry sense if there was a wide target market.	Could reach out to all target markets and create most revenue and appeal to all ages, nationalities and genders.
Size	Its important to make the radio right in size so its not too heavy to carry from room to room, nor too big. Also if its too small the necessary circuitry wont be able to fit. The speakers need to be to a decent size for quality sound output and worth the money being spent. Buttons are also a factor that is important to size, in order to differentiate the function per button.	I would like the radio to be an ideal size and comfortable for whatever user happens to uses it, I do however need to remember that it is firstly designed for the use and benefit of adults in a specific age group and not designed for those with impairments.	
Cost	It is vital the product is not too costly, (keep to a low material) but as the radio must sustain a number of years, it must be a made out of a durable material, therefore it can be a bit more pricey to compensate for the years of use.	I would like the cost to be kept to a minimum so that the target market can be as broad as possible, and not just specifically aimed at the 'real idea' user. It could be more pricey if aimed at a more sophisticated target age group and encouraged more modern approaches to new technology it could increase the potential overall price and rrp.	
Style/ Theme	It is vital that the product is not heavily themed, age specific or gender specific; so It can expand to the maximum target market appeal.	If there was a theme to be used, then it should be something that isn't gender or age specific, so it could be something that could be applicable to most peoples likes and styles and house decos.	
Function	It is important that the radio fulfils its purpose as primarily the statement radio piece its designed to be. The connection between smart phones and tablets through the technology of Bluetooth is also crucial as it's a USP.	It would be ideal if the radio had a variety of functions, and not only one that is solely for DAB music, for example a place to store personal itunes or a wifi connection for music software like spotify. It would mean more work and clever designing, and could be used in a variety of placements.	It could have accessories that make the product have multiple functions, ie; an attachment that creates a surround sound function for television and movies (home cinema).

CONSUMER QUESTIONNAIRES POINT 2.0

Through the design process, it is vital that the target market are involved and know exactly what is being designed for them. I was lucky enough to send out emails to varying people of the consumer age groups and have responses of the chosen initial final design. Here are their answers for the final model outcome in situ;

Hey Abbs,

So overall I think it is good, my only few comments are that I am not sure about the blue edging around the middle piece (I am not sure what it is- but from memory is that going to be where the LED light is?) I also think the silver buttons looked better when they were getting progressively smaller. I do like the light wood, I think that looks really cool. Does it also have a clock on the front as well?

I think it would be worth maybe £30-£50.I would buy it as I think it would look good hanging from my wall and it would not clash with anything which is a big plus. My rating would be 8.5/10.

I hope this is useful, if you need me to say anything more, let me know.

Elizabeth. 26

I love it because it is your work but also I think its a great statement piece and will appeal to an older market maybe from mid 20's to 99 and beyond and its a great additional to any room of the house. The grey buttons down the side look very smart and from a distance it looks like a mirror.

Yes I would buy it but hopefully I may get a cheeky freebie, the whole DAB looks retro with a modern twist. Its 5 stars from your biggest fan.

Victoria, 42

Hey abbey,

I have received your final product pictures for feedback. I think it looks great, I love the shape and I would definitely buy it. I would probably pay around £30-£40 for it. Also if it came with a stand to put on or something to connect it to another set of speakers would be good. Other than that I think it's great! Id rate it 8 out of 10

Sarah, 20

Morning Abs Like; Portability; Shape; Size; Position of Knobs

Would Prefer; Knobs to decrease in size the smallest being at the top;Light Wood or Painted light neutral colour;

Not Sure About; Solid black appearance of tuner on black speaker background appreciate it would be illuminated by blue LED ring.

Marketing point; To be manufactured with a choice of coloured woods or painted gloss surface

Alan, 77

Abb,

The thing that impresses me most about your design is the portability. I could use it anywhere in the house and don't have to worry about not hearing my music when I change rooms, which I would do if playing music off my laptop or from a stationary stereo system.

From looking at the product I would guess it costs in the region of £50, which might be too much for me to afford on a student budget but I would be happy to receive it as a gift.

I'd suggest making the buttons touch screen so they don't stick out from the device, giving it a more sleek and modern look. Yet overall I really like the product and would give it a 9/10.

Ryan, 20

It is a very stylish and versatile product which I believe can be aimed at a homemaker audience however with dab radios I would aim at households as a whole due to their current decline of sales in the market and the fact that this is generally the only audience whom would purchase such a product.

I do however really like the style and shape of the product and this is very distinctive from anything else that I have seen on the market and this is from working in an electrical goods retailer and I would think this would stand out from everything else and thus I would rate this 8/10

The only improvements I would say is a self standing feature may be useful but other than that it is a very original and impressive product

Jake, 22